## NEW NORTH AMERICAN TRYPETIDÆ.

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Trypeta (Acidia) tortile, n. sp., 9. Wholly yellow except a black dot above each wing; ovipositor brown; bristles black; scutellum bearing four bristles; thorax and abdomen shining; ovipositor flat, very broad, nearly as long as the last two abdominal segments. Wings hyaline, the anal cell, bases of marginal, sub-marginal, and of the first basal cell, also the apex of the second basal cell, yellow ; a black spot on furcation of the second and third veins, and one on lower half of vein at apex of anal cell; a brown band commences on costa between apices of auxiliary and of first vein, and extends to the discal cell, going over the small cross-vein and continuing as a yellowish streak into the discal cell; a second brown band commences on the costa between apices of the first and second veins, and crosses the wing, passing over the posterior crossvein, and near its terminus sending a spur into the third posterior cell; apex of wing from slightly before apex of the second vein to beyond tip of fourth vein, brown; first and third veins bristly. Length, 5 mm. Washington (O. B. Johnson). A single specimen.

The colouring of the wings somewhat resembles Figure 9, Plate X., of Loew's "Monographs," Part III., but the fifth vein is not bordered with brown; the brown at the apex of the wing is separated at the costa from the preceding cross-band; the band crossing the discal cell is scarcely perceptible, etc.

Trypeta (Rhagoletis) formosa, n. sp.,  $\mathcal{F} \ Q$ . Black, the head and its appendages (except the ocellar tubercle and occiput), a line reaching from humeri to each wing, scutellum except the sides at base, halteres and legs, yellowish; thorax and scutellum sub-opaque, the abdomen shining; proboscis slender, geniculate, the apical half bent downward; sides of front and scutellum each bearing four bristles; ovipositor compressed, slightly exceeding the last four abdominal segments in length; wings hyaline, marked with three cross-bands and two spots of brown, extreme base of wing smoky; the first cross-band begins at first vein and extends over veins at bases of discal and third posterior cells, stopping near middle of axillary cell where it is much widened; the second band begins on costa between apices of auxiliary and first veins and extends over small cross-vein, and through the discal and third posterior cells to the wing margin, its greatest width occurring at the fifth vein; a brown costal spot between apices of first and second veins, extending across marginal and sub-marginal cells; the next band begins just before apex of second vein and crosses the wing, passing over the posterior cross-vein, widest and angled at the fourth vein, the band having the form of a bayonet; a brown spot fills apex of first posterior cell (except sometimes a spot in its extreme apex), and encroaches on the sub-marginal and second posterior cell; length, 3 to 4 mm. Southern California. One male and two females.

The wings somewhat resemble Figure 16, Plate IX,, Loew's Monograph, but the first band is at apex of second basal cell, there is an additional brown costal spot between the second and third bands, the third band begins at apex of second vein, etc.

Trypeta (Aciura) aplopappi, n. sp., 3 9. Black, the pleura largely brown, the head and its appendages, the legs except the coxæ, yellow, a brown vitta on outer side of front femora; knob of halteres bright red; bristles black, the short pile light yellow; front bearing four bristles each side, the scutellum bearing only two; abdomen shining, not bristly; ovipositor flattened only at apex, as long as last two abdominal segments ; wings of nearly an equal width, dark-brown, the following spots whitish hyaline : two in costal cell, two in marginal cell beyond apex of first vein, the second spot extending half-way across the submarginal cell; one in first basal cell opposite apex of first vein, one in upper outer angle of discal cell, a basal spot and oblique streak crossing second posterior cell, five in third posterior cell, three of which are on the wing margin; from two to four in axillary angle; first vein bristly, the others bare; length, 4 mm. Southern California. Three males and two females, which issued in April and May from irregular galls, about 8 mm. long by 4 in diameter, on the smaller branches of Aplopappus pinifolius.

The wings are very similar to Figure 8, Plate X., of Loew's Monograph, but there is no hyaline spot in the first posterior cell, only one in the first basal, axillary angle not wholly hyaline, etc.

Trypeta (Carphotricha) cultaris, n. sp.,  $\mathcal{J} \ \mathcal{Q}$ . Agrees in all respects with Loew's description and figure of culta (Monographs, etc., III., pages 276 to 279) with these exceptions : Ovipositor not longer than the last three abdominal segments ; wings having only one brown ray between apices of second and third veins; no darker spot in second posterior cell; length, 6 to 7 mm. Southern California. One male and two females, in January.

These differences are constant in the numerous specimens examined but not now before me. So far as I am aware, the typical *culta* does not occur on the Pacific coast.

Trypeta (Neaspilota) signifera, n. sp.,  $\Diamond \ Q$ . Yellow, dorsum of thorax and metanotum except the sides, opaque grayish-black, the abdomen sometimes brown; front bearing five bristles each side, the scutellum bearing four; ovipositor flattened, as long as the last three abdominal segments; wings hyaline, basal half or less of space between apices of auxiliary and first vein brown; first vein bristly, the others bare; length, 3 mm. Southern California. Six males and one female.

The wings are like Figure 10, Plate XI., of Loew's Monograph, except that the apex of the stigma is broadly hyaline.

Trypeta (Tephritis) baccharis, n. sp., & Q. Yellowish-brown, base of each abdominal segment and spot each side of middle of metanotum, dark gravish-brown; front bearing four bristles each side, scutellum also bearing four bristles; wings narrow, of nearly an equal width, opaque white mottled with brown, which is broken up into spots, except a border on the apex beginning between apices of first and second veins and extending nearly to axillary angle, where the brown is very faint; along the wing margin this border contains a white spot in each angle of the sub-marginal cell, entire apex of the first posterior cell, three spots in apex of second posterior cell, and seven between this cell and the axillary angle; the brown spots form an indistinct broad band, reaching from the stigma to the wing margin at lower end of the posterior crossvein ; first vein bristly, the others bare ; length, 5 mm. Southern California. Nine males and seven females, which issued from January to April from irregular oval galls about 12 mm. long by 4 in diameter, on tender twigs of Baccharis viminea.

The wings somewhat resemble Figure 5, Plate XI., of Loew's Monograph, but are much paler, the darker portions forming two cross-bands, one near the middle, the other at the apex of the wing.

Trypeta (Euaresta) Californica, n. sp.,  $\mathcal{Q}$ . Black, the head and its appendages, corners of thorax, margin of scutellum, large spots on pleura, and the legs, yellowish, halteres pink, pleura near the wings, and bases of the latter, tinged with pink; thorax and scutellum opaque gray pollinose, abdomen glabrous, shining; front bearing four bristles each side, the scutellum bearing only two; ovipositor longer than the last three abdominal segments, over three times as broad at base as at the apex; wings

brown, the following spots hyaline : four in costal cell (none between apices of auxiliary and first veins); three in marginal cell, situated between apices of first and second veins, three in sub-marginal cell of which one is contiguous to the middle spot in marginal cell and two are between apices of second and third veins; three in first posterior cell, the one in the apex reaching the wing margin, three in second posterior cell, all of them contiguous with the wing margin, four in third posterior cell, of which three are along the wing margin; three in axillary cell, two in the second basal, two in first basal, of which one is sub-basal and the other near its apex, also one in discal cell near its apex; first vein bristly, the others bare; length, nearly 4 mm. Southern California. A single female, in May.

The wings closely resemble Figure 23, Plate X., of Loew's Monograph, but there is only one hyaline spot in the discal cell, four in the third posterior, etc.

Trypeta (Euaresta) araneosa, n. sp., 2. Gravish-black, the head and its appendages (except a portion of the occiput), halteres and legs except sometimes a portion of the femora, yellowish; bristles black, the short pile yellowish; front bearing four bristles each side, scutellum bearing four bristles; wings brown, the following spots hyaline: three in costal cell nearly filling that cell (none between apices of auxiliary and first veins), four in marginal cell, of which two are near the base and two between apices of first and second veins ; five in sub-marginal cell, of which one is at the base, two near the middle and two between apices of second and third veins; five in first posterior cell, the one in the apex reaching the wing margin; three in the second posterior cell, each of which crosses that cell ; four in third posterior cell, from four to seven in the discal cell, one of which touches the vein at the base of that cell; and three in first basal cell; second basal, anal and 'axillary cells largely hyaline; first vein bristly, the others bare ; ovipositor scarcely longer than the last abdominal segment; length, 4 mm. Southern California. Four females, in January and February.

The wings somewhat resemble Figure 21, Plate X., of Loew's Monogragh, but the stigma is wholly brown and the base of the wing to apex of auxiliary vein is almost wholly hyaline, excepting a brown streak crossing the third posterior cell near its base.

Trypeta (Euaresta) stelligera, n. sp.,  $\mathcal{J}$ . Black, the head and its appendages (excepting the occiput) the halteres and legs, yellow; thorax

and scutellum gray pollinose, the abdomen glabrous, shining; front each side and the scutellum bearing four bristles; wings brown, the following spots hyaline: four in costal cell (a yellow dot on costa just beyond apex of auxiliary vein), two in marginal cell situated between apices of first and second veins, three in sub-marginal cell, of which two are between apices of second and third veins and the third is contiguous to the first spot in marginal cell; three in first posterior cell, the one at apex reaching the wing margin; four each in second and third posterior cells, three in each cell reaching the wing margin; three in first basal cell, of which two are near its base and the other near its apex; and one in discal cell near its apex; second basal, anal and base of axillary cells largely hyaline; first vein bristly, the others bare; length, 4 mm. Southern California. A single male specimen.

The wings resemble Figure 23, Plate X., of Loew's Monograph, but there is no hyaline spot just before apex of second vein, only one in the discal cell, etc.

Trypeta (Euraesta) tapetis, n. sp., & Q. Yellowish, the dorsum of thorax, lower part of pleura, metanotum and ovipositor, black, the abdomen sometimes marked with blackish; scutellum bearing four bristles; wings brown, the following spots hvaline : two in costal cell, one between apices of auxiliary and first veins; four or five in marginal cell, of which two or three are between apices of first and second veins; four in submarginal cell, of which two are between apices of second and third veins, that at tip of second vein encroaching on the marginal cell; four in first posterior cell, of which one is near the base and three near its apex, one of the latter spots sometimes being divided into two spots; three in second posterior cell, each reaching the wing margin, but two of these spots are sometimes merged into one; four in third posterior cell, three of which reach the wing margin; three in first basal cell, and two in discal cell, of which one is near its base and the other near its apex; second basal, anal and base of axillary cell largely hyaline ; first vein bristly, the others bare; length, 4 mm. New Mexico (E. L. Keen). Four males and two females.

The wings somewhat resemble Figure 28, Plate X., of Loew's Monograph, but the hyaline spots are larger and more numerous, some of them merging into each other so as to form a cross-band, beginning just before apex of auxiliary vein, and reaching the wing margin just beyond apex of sixth vein.